Emission Statement Hardcopy Instructions

GENERAL INFORMATION

All Sources - **Follow these instructions for reporting your facility's annual emissions statement.**

New Sources - **Follow these instructions and use the blank forms. The forms are available as either a Microsoft Word© or Adobe Acrobat© document.**

Existing Sources - **Make sure to request hardcopy forms from the Office of Air Quality. The forms that can be provided to you will be nearly complete and contain much of the information reported last year. The only exception to this will be that some fields will be purposely left blank and highlighted to bring them to your attention. These fields must be filled in (as appropriate) to complete the emissions statement submittal.**

If you need to add anything use the appropriate blank form.

Form 1: Facility General Information

The Facility General Information form contains all of the information required under state rules for the entire facility. This form will only need to be completed once and should be the first page of your submittal to the Office of Air Quality. Make sure that you review the information on this form to ensure that it is correct and up to date.

Section 1: Facility Identification

a.) **County Code.** The county code is a three-digit number assigned to each county. This number is usually used when assigning a permit number. The county code will generally be the first three numbers of the permit number.

b.) **Plant ID.** The plant ID is a five-digit number used in conjunction with the county code to identify the facility. The plant ID will generally be the last five numbers of the permit number. Below is an example of a permit number with the County Code and the Plant ID pointed out.

c.) **Facility Name.** Simply the name of the facility. The name should be the same as on the permit, if your facility's name has changed make sure to update it.

Section 2: Physical Address

a.) **Source Address.** The actual physical street address of the facility. This may be different from the mailing address, make sure that you are using the actual street location. DO NOT USE A POST OFFICE BOX FOR THE SOURCE ADDRESS.

b.) **Source City and Zip Code.** Like the source address, this should reflect the actual location of the source.

Section 3: Mailing Address

a.) **Mailing Address.** The street address or post office box information required to ensure that any mailings are properly received.

b.) **Mailing City, State, Zip Code.** Like the above make sure that this information is properly filled out and updated to ensure receipt of any mailings.

SECTION 4: SOURCE COORDINATES

a.) **UTM Vertical and UTM Horizontal.** UTM stands for Universal Transverse Mercator, a mapping system similar to latitude and longitude. The UTMs should be given in Kilometers.

b.) **Latitude and Longitude.** The more traditional way of mapping a sources location. The latitude and longitude should be given in degrees, minutes and seconds.

SECTION 5: INDUSTRIAL CLASSIFICATION

a.) Primary NAICS Code. The North American Industry Classification System (NAICS, pronounced Nakes) is the classification system that has replaced the 1987 Standard Industrial Classification system. This is a code of up to six characters to identify establishments by their primary activity. This code can be found in the attached table, on EPA's website: http://www.epa.gov/ttn/chief/codes/naics.pdf, or on the U.S. Census Bureau's webite http://www.census.gov/epcd/www/naics.html**.**

b.) Primary SIC Code. The 1987 Standard Industrial Classification system is the traditional system of identifying a facility's primary operation. This system will continue to be used to aid in the transition to the NAICS Codes. This code can be found in the attached table, on EPA's website: http://www.epa.gov/envirofw/html/airs/sic_code.html, or on the U.S. Census Bureau's webite http://www.census.gov/epcd/www/naics.html**.**

SECTION 6: CONTACT INFORMATION

a.) **Emissions Contact Official and Title.** This is the name and the title of the person responsible for the emissions statement submission. This must be an employee or officer of the facility. THIS CANNOT BE A CONSULTANT.

b.) **Emissions Contact Phone Number.** The phone number of the above.

c.) **Emissions Contact Fax Number.** The Fax number of the above, if available.

d.) **Emissions Contact E-Mail Address.** The e-mail of the above, if available.

e.) **Year of Inventory.** This should be the year for which you are completing the emissions statement. Generally the year prior to the current calendar year.

f.) **Date Updated.** The date that the emissions statement was completed.

g.) **Signature.** The signature of the Emissions Contact Official.

Form 2: Stack Parameters

Stacks can be either physical or logical stacks. Physical stacks are just that, a structure that vents emissions to the atmosphere. These are the most familiar stacks to people. Logical stacks are a little more difficult an idea. These can be best described as emissions escape points like doors, windows or building vents.

SECTION 7: STACK INFORMATION

a.) **Stack ID.** This is a numeric field used by OAQ to associate a specific stack with the process it vents. This must be a number and should be in sequential order.

b.) **Description.** Include a short description of the stack that will be meaningful to you.

c.) **Height.** The stack height must be given in feet. Enter the vertical distance between the point of discharge and the ground, when it can be identified. If no definable stack height exists supply a value for a vent height. For processing that takes place within a building, but is not attached to a stack, the building itself would be considered the "stack" and any window, roof, vent, door, etc. would be considered the exit point.

d.) **Diameter.** Enter the inside diameter of a round gas exit point of emission, measured in feet. If the exit is not round, calculate D = 1.128 square root of A; where A = cross-sectional area in square feet and D = equivalent diameter.

e.) **Flow.** Enter the exhaust gas flow rate for the stack in actual cubic feet per minute (acfm). If an actual measurement is not available, use the design or maximum value.

f.) **Temp.** The temperature of the gas exiting the stack or vent in degrees Fahrenheit. If the exit gas is at ambient temperature use 70° F.

g.) **Latitude.** Enter the latitude or UTM Vertical (Northing) coordinate used to define the location of the point of discharge. You need to indicate the coordinate used by circling the method at the top of the column. Latitude must be in degrees, minutes, seconds. UTMs must be in kilometers.

TIPS

1. IF YOU DO NOT KNOW THE SPECIFIC COORDINATES OF THE STACK YOU MAY USE THE FACILITY COORDINATES.
2. STATE PRODUCED HARDCOPIES USE LATITUDE AND LONGITUDE

h.) **Longitude.** Enter the longitude or UTM Horizontal (Easting) coordinate used to define the location of the point of discharge. You need to indicate the coordinate used by circling the method at the top of the column. Latitude must be in degrees, minutes, seconds. UTMs must be in kilometers.

Form 3: Abatement Equipment

This form is for listing all of your facility's abatement (control) equipment. If your facility does not have any abatement equipment, this form does not have to be filled out. Skip to Section 9: Group Information.

SECTION 8: ABATEMENT EQUIPMENT

a.) **Equipment ID.** This is a numeric field used by OAQ to associate a specific piece of abatement equipment with the process it controls. This must be a number and should be in sequential order.

b.) **Equipment Code.** The equipment code is a 3-digit number used to identify the type of abatement equipment used. A list of these codes is included with the attachments.

c.) **Abatement equipment description.** This should be a brief description of the abatement equipment being used that is useful to you.

d.) **Pollutant.** **Only** the pollutants that are being controlled should be listed. (e.g.: a fabric filter does not control VOC or CO emissions)

e.) **Abatement Efficiency.** The control efficiency is the operating efficiency of the equipment for removing the specified pollutant from the emission stream as a percentage. This information may be determined from a stack test or from the manufacturer's specifications.

Form 4: Group/Process/Emissions

Use this form to list all of your facility's groups, processes and associated emissions.

SECTION 9: GROUP INFORMATION

A group is a set of processes that can be lumped together based on their operating schedule. A couple of examples would include a paint booth with multiple operations, an assembly line or a boiler that uses one or more fuels.

a.) **Group Number.** This is a numeric field used by OAQ to identify a specific group. This must be a number and should be in sequential order.
b.) **Description.** A short description of this group that is easily recognizable to you and to OAQ staff who may need to read/verify the information.

Operating Schedule

c.) **Hours/Day.** Enter the average number of hours per day that this group operates. The value cannot be higher than 24.
d.) **Days/Week.** Enter the average number of days per week that this group operates. The value cannot be higher than 7.
e.) **Weeks/Year.** Enter the number of weeks per year that this group operates. The value cannot be higher than 52.
f.) **Hours/Year.** Enter the number of hours per year that this group operates. The value cannot be higher than 8,760.

Quarterly Operating Schedule.
Expressed as a percent for each quarter and must add up to 100%. If the process did not operate for a given quarter, place a 0 in the field. Refer to the following to properly allocate your activity.

g.) **1st Quarter.** Enter the percentage of annual activity for the period January through March. This must be expressed as an integer, no decimals.
h.) **2nd Quarter.** Enter the percentage of annual activity for the period April through June. This must be expressed as an integer, no decimals.
i.) **3rd Quarter.** Enter the percentage of annual activity for the period July through September. This must be expressed as an integer, no decimals.
j.) **4th Quarter.** Enter the percentage of annual activity for the period October through December. This must be expressed as an integer, no decimals.

SECTION 10: PROCESS INFORMATION

A group can contain one or more processes. A couple of examples would be a boiler that can use natural gas or fuel oil and a paint booth that uses different coatings and may include sanding.

a.) **Process Number.** This is a two-digit numeric field used by OAQ to identify a specific process within a group. This must be a number and should be in sequential order.

b.) **Description.** A short description of the process that is easily recognizable to you and to OAQ staff who may need to read/verify the information.

c.) **Source Classification Code (SCC).** The Source Classification Code is an eight-digit code that is used to identify the activity taking place. The SCC code can be found on EPA's website: http://www.epa.gov/ttn/chief/codes/scc.pdf.

d.) **Units.** These are the units of reported process rate. For instance: if you intend to enter information on the amount of coal processed, then the units will probably be in tons; if you are intending to report about the amount of paint applied the units may be in gallons or tons of coating applied. We recommend that you use units associated with the SCC number, but if not specify what units are being used.

e.) Stack Number. This needs to be filled in with the corresponding stack ID from the stack form. If the process does not have a stack, you may skip this field.

f.) **Process rate (throughput).** This is the actual annual amount of goods consumed or produced. The unit for the process rate was identified above (see step d. of this section).

If the emissions calculation does not use ash content, sulfur content or heat ratio skip to step j.

g.) **Ash Content**. Ash content of the emissions associated with the segment combustion process, indicated as a weight percentage.

h.) **Sulfur Content.** The sulfur content of the fuel used in the combustion process, indicated as a weight percentage.

i.) **Heat Ratio.** The heat ratio will be used in calculating emissions via AP-42 or local emission factors. This should be the heat content of the fuel used divided by the average heat content of that fuel type.

j.) **Maximum Operation Rate.** The maximum hourly rate for the process, expressed in the same units as the Process Rate.

If the emissions are not controlled skip to Section 11.

k.) **Abatement Equipment Order**. This is the order in which the exhaust encounters the control devices. This must be a number and should be consecutive.

l.) **Abatement Equipment ID.** This is the number used to identify the abatement equipment on the Abatement Equipment Identification Form (Step a. of Section 8).

m.) **Capture Efficiency.** The percentage (%) of emissions from the process that reaches the abatement equipment (i.e., How much of the emission stream actually flows into, or is captured by, the abatement equipment as opposed to the total emissions from the process).

SECTION 11: EMISSIONS INFORMATION

a.) **Pollutant.** A list of pollutants that are emitted from the process. You only need to list those pollutants which are emitted, for instance we would not expect to see CO emissions from painting.

b.) **Estimated Emission Method.** A code used to identify the technique used to calculate the estimated emissions. The codes are below.

1 Source Test
2 Mass Balance
4 Best Guess
7 Source Closed
8 AP-42
9 Local EF

All of the method codes, except 7 and 8, need to have a simple written statement as to how the emissions were determined (e.g., through stack tests performed on a specific date or mass balance calculations enclosed). This simple explanation should be submitted in a cover letter or as a separate document.

c.) **Emission factor.** An estimate of the rate at which a pollutant is released to the atmosphere as the result of some activity, expressed as pounds per process rate units (Section 10, step d). You only need to supply emission factors when using method codes 8 or 9.

d.) **Overall Control Efficiency.** The rate at which the pollutants emitted are controlled. This can be estimated by multiplying the abatement efficiency (Section 8, step e) by the capture efficiency (Section 10, step m)

e.) Estimated Emissions. The tons per year for each pollutant listed. **Reminder:** All of the calculation units must agree. For example, a boiler using natural gas must have a SCC # that applies to natural gas in $mmFt^3$ and the process rate must be in $mmFt^3$. The maximum operation rate must also be expressed in the same $mmFt^3$/hour.

For assistance contact Jay Koch at (317) 233-0581, Michele Boner at (317) 233-6844, Sandra Baliga at (317) 232-8244, Sarah Raymond at (317) 232-8449, or your local agency.